COLSF 1.3 V1

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Mail Stop PV-11 • Olympia, Washington 98504-8711 • (206) 459-6000

April 3, 1992

Mr. Neil Thompson
EPA - Region 10
1200 Sixth Avenue
Seattle, WA 98101

RE: Colbert Landfill - Ecology's Review of Quality Assurance Project Plan, Phase II Remedial Design-Remedial Action

Dear Mr. ~~Thompson~~ Neil:

Ecology's review of the above named document is enclosed. In transmitting our comments along with EPA comments to Spokane County, please make adjustments in the enclosed DRAFT cover letter as we have discussed. If you have any questions please do not hesitate to contact me at 438-3079.

Sincerely,

Michael Kuntz

Michael Kuntz

MK:ln
Enclosures

cc: Russ Darr

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April 3, 1992

TO: Mike Kuntz

FROM: Alex Coleman

SUBJECT: Review/Comment on Colbert Landfill Quality Assurance Project Plan (QAPjP) and Sampling and Analysis Plan (SAP)

In response to your request, I have reviewed the Quality Assurance Project Plan (QAPjP) and the Sampling and Analysis Plan (SAP) for Colbert Landfill and offer the following comments. Many of these comments were offered before, in the October 29, 1990 memo on Colbert Landfill QAPjP and SAP.

GENERAL COMMENTS

1. The Quality Assurance Project Plan (QAPjP) and the Sampling and Analysis Plan (SAP) should specify the decontamination procedures to be used in the field for collecting metals samples for analysis. (For example, when sampling for trace metals, a 10% nitric acid rinse followed by distilled deionized water can also be used.) Steam cleaning should also be an option to clean field equipment (such as split spoons, etc.), which may present potential sources of interference. Whenever feasible, all field sampling equipment should be laboratory cleaned, wrapped and dedicated to the particular sampling point.

2. The QAPjP and SAP lack basic sampling strategies appropriate to generate quality data. Such strategies involve statistical techniques, random, representative and composite sampling or any other valid field activity to improve data confidence and accuracy.

3. One of the first steps in the QAPjP and SAP planning process and the data quality objectives is the identification of the analytical laboratory, so that a determination can be made in advance of the analytical capabilities to achieve the required methods detection or the risk-based practical quantitation limits. This identified laboratory should be a certified or accredited laboratory with an approved QA/QC plan. The QA/QC plan should be referenced or attached as an appendix to the document.

4. In support of data quality objectives (DQO) 5% to 10% splits and field duplicates should be done to guarantee reliability and consistency. Laboratory or field splits are recommended for water samples not for soils, since splits are identical aliquots of a single sample used to estimate the homogeneity of a sample. Generally, splits samples are used to compare data results from different laboratories.

5. The SAP should identify a monitoring well for background sampling and analysis of groundwater and soil.

6. The SAP needs to address the sampling protocol as it relates to soil density, particle size, compaction test, moisture content, etc. These are essential tests to determine future cleanup alternatives.

7. If groundwater samples are to be filtered in the field for total and dissolved metals, eg. chromium, then it is recommended that a blank deionized water sample be filtered and analyzed in the same manner.

8. Soil sampling also requires special procedures to minimize the loss of volatile organic compounds during transit from the field to the laboratory. In some cases, a methanol extraction method is used. This procedure calls for the collection of duplicate samples in tared 40 ml vials that contain 10 mls of methanol with a 0.5 ml of surrogate solution at 50 ug/ml. A reagent methanol blank should be prepared in the same manner as the sample vials.

9. In addition to the standard operating procedures (SOP) listed, the document should reference or attach as an appendix other SOP such as:

   - monitoring well installation
   - groundwater monitoring
   - monitoring well purging and water level measurement
   - monitoring well development and bore hole logging
   - structural surface sampling

10. The nature and extent of lead and arsenic in the environment and its health impacts, especially from industrial and municipal sites like Colbert Landfill, requires a more detailed analysis and treatment of lead and arsenic in the Remedial Action SAP. There is a lack of both data or pending analysis of lead and arsenic in the soil, groundwater, and effluent.

11. The QAP,P and SAP need to specify the quantification limits and their respective methods of analysis for soils.

12. Both documents should identify the key personnel responsible for managing the project; such as project manager, laboratory quality assurance officer, quality assurance coordinator QAC.

13. The documents should also include analytical discussion and sampling protocol relating to EPA toxicity characteristic leaching procedure (TCLP). The TCLP must be used on metals, insecticides, herbicides and certain other listed hazardous waste constituents to characterize waste streams.

SPECIFIC COMMENTS

Specific comments are consistent and in agreement with those listed by EPA, March 11, 1992 memorandum.

AC/df

cc: Steve Robb